CLAIMS

What is claimed is:

1   1.   A data communications method comprising:

2   providing configuration parameters regarding capabilities associated with

3   a receiving device and usable to implement scaling of media data to be recieved;

4   receiving media data scaled according to the configuration parameters

5   and comprising a plurality of frames for generating a plurality of respective

6   images;

7   initially decoding compressed media data for an initial one of the frames

8   and less than all of the frames;

9   initially displaying at least one visual image using the initially decoded

10   media data;

11   randomly selecting an other of the frames after the displaying;

12   subsequently decoding compressed media data of the other of the frames

13   after the initially decoding and the initially displaying; and

14   subsequently displaying an other visual image using the subsequently

15   decoded media data.

1   2.   The method of claim 1 wherein the initially decoding comprises

2   decoding frames of a first type and the subsequently decoding comprises

3   decoding frames of a second type different than the first type, and wherein the

4   first type of frames comprise data usable to decode the second type of frames.

1   3.   The method of claim 1 wherein the media data comprises data for

2   a plurality of multiple sequences of visual images synchronized with one

3   another.

1   4.   The method of claim 1 further comprising accessing a user input

2   entered responsive to user navigation of the at least one visual image, and

3   wherein the randomly selecting comprises selecting the other of the frames

4   responsive to the user input.

1   5. The method of claim 1 wherein the compressed media data
2   comprises data for a sequence of a plurality of images, and the randomly
3   selecting comprises selecting the other of the frames out of sequence.

1   6. The method of claim 1 wherein the subsequently decoding
2   comprises decoding compressed media data of no more than one frame to
3   display the other visual image.

1   7. The method of claim 1 further comprising:
2   accessing the configuration parameters within a sending device; and
3   scaling the compressed media data according to the configuration
4   parameters to provide data steams of the compressed media data comprising
5   different amounts of data for a given subject.

1   8. The method of claim 7 wherein the scaling comprises scaling
2   according to at least one of temporal, spatial, signal-to-noise ratio, and
3   interactivity scaling attributes.

1   9. The method of claim 1 wherein the frames individually comprise
2   temporal, spatial, signal-to-noise ratio, and interactivity levels of scalability.

1   10. A compressed media data decoding method comprising:
2   accessing compressed media data of a plurality of frames corresponding
3   to a sequence of images, wherein the frames correspond to a plurality of
4   respective images of the sequence;
5   accessing a plurality of data requests for selected ones of the images;
6   selecting respective ones of the frames of the media data responsive to
7   the data requests; and
8   decoding compressed image data of the selected ones of the frames,
9   wherein the decoding comprises decoding at least some of the frames out of
10   sequence responsive to the selecting.

1   11.   The method of claim 10 further comprising receiving the frames in
2   a linear order corresponding to the sequence of the images.

1   12.   The method of claim 10 wherein the accessing the compressed
2   media data comprises receiving the compressed media data within a recipient
3   communications   device,   and   further   comprising   providing   configuration
4   parameters corresponding to capabilities of the recipient communications device,
5   and the receiving comprises receiving the compressed media data scaled
6   according to the configuration parameters.

1   13.   The method of claim 10 further comprising:
2   decoding compressed media data of a plurality of a first type of frames,
3   and wherein the data requests correspond to images generated using media data
4   of the first type of frames, and wherein the decoding the selected ones of the
5   frames comprises decoding a second type of frames different than the first type
6   of frames.

1   14.   The method of claim 13 wherein the data requests correspond to
2   user inputs of a user navigating the images generated using the media data of
3   the first type of frames.

1   15.   A compressed media data decoder comprising:
2   an interface configured to access compressed media data comprising a
3   plurality of frames usable to generate a plurality of respective images, wherein
4   the frames comprise a plurality of frame types; and
5   processing circuitry coupled with the interface and configured to initially
6   decode a first type of the frames at an initial moment in time to initiate viewing
7   of at least one of the images, to control a display to depict the at least one
8   image, to access a data request for depiction of another one of the images after
9   the depiction of the at least one image, and to decode the compressed media
10   data of another frame comprising a second type of frame using the initially
11   decoded media data of the frame corresponding to the at least one image.

1   16.   The decoder of claim 15 wherein the data requests are generated
2 responsive to user interaction with the at least one image, and the processing
3 circuitry is configured to initially decode the first type of frames without user
4 input.

1   17.   The decoder of claim 15 wherein the compressed media data
2 comprises data for a sequence of a plurality of images comprising a linear order,
3 and the processing circuitry is configured to decode the compressed media data
4 of the another frame out of sequence and responsive to user input.

1   18.   The decoder of claim 15 wherein the processing circuitry is
2 configured to decode an entirety of the compressed media data of the first type
3 of frames prior to decoding the compressed media data of the second type of
4 frames.

1   19.   The decoder of claim 18 wherein the first type of frames comprise
2 anchor frames.

1   20.   The decoder of claim 15 wherein the processing circuitry is
2 configured to control the display of at least one image prior to decoding of all of
3 the accessed compressed media data.

1   21.   The decoder of claim 15 wherein the processing circuitry is further
2 configured to provide configuration parameters corresponding to capabilities of a
3 recipient communications device associated with the compressed media data
4 decoder, and wherein the compressed media data comprises data scaled
5 according to the configuration parameters.

1   22.   The decoder of claim 21 wherein the processing circuitry is
2 configured to decode the scaled data.

1   23.   The decoder of claim 15 wherein the processing circuitry is
2   configured to decode no more than a single one of the second type of frames to
3   depict the another one of the images.

1   24.   An article of manufacture comprising:
2   processor-usable media comprising programming configured to cause
3   processing circuitry to:
4   access compressed media data of a plurality of frames for a
5   plurality of images of a sequence;
6   access a plurality of data requests with respect to the compressed
7   media data;
8   select at least some of the frames for decoding responsive to the
9   data requests;
10   decode the compressed media data of the selected frames,
11   wherein the selecting and decoding comprise selecting and decoding the
12   compressed media data of the frames out of sequence;
13   implement generation of respective images using the decoded
14   media data.

1   25.   The article of claim 24 wherein the compressed media data
2   comprises data of the frames arranged in a linear order corresponding to the
3   sequence of the images.

1   26.   The article of claim 24 wherein the decoding comprises decoding
2   the compressed media data of the selected ones of the frames in real time
3   during user navigation of at least one of the images.

1   27.   The article of claim 24 wherein the programming is configured to
2   cause processing circuitry to initiate decoding of at least some of the
3   compressed media data without user input, and the data requests are generated
4   responsive to user navigation of an image generated using media data decoded
5   without the user input.

1   28.   A data communications system comprising:

2   transmitting means for accessing media data of a plurality of frames for a

3   sequence of visual images of at least one subject, for encoding the media data

4   using a compression scheme providing compressed media data comprising a

5   plurality of different frame types, and for outputting the compressed media data

6   after the encoding; and

7   receiving means coupled with the transmitting means and comprising

8   means for receiving the compressed media data after the outputting, wherein

9   the receiving means further comprises means for initiating decoding of the

10   compressed media data of a first type of the frames less than all the frames to

11   initiate viewing of one of the images of the subject, for accessing a plurality of

12   data requests for images comprising compressed media data of a second type of

13   the frames, and for decoding the compressed media data of respective

14   requested ones of the second type of the frames responsive to the data

15   requests.

1   29.   The system of claim 28 wherein the transmitting means comprises

2   means for transmitting the first type of frames at an initial moment in time and

3   for transmitting the second type of frames at a subsequent moment in time

4   responsive to the data requests from the receiving means.

1   30.   The system of claim 28 further comprising providing configuration

2   parameters corresponding to capabilities of the receiving means, and the

3   receiving comprises receiving the compressed media data scaled according to

4   the configuration parameters.

1   31.   The system of claim 28 wherein the receiving means comprises

2   means for communicating respective configuration parameters to the

3   transmitting means, and the transmitting means comprises means for scaling the

4   compressed media data according to the configuration parameters.

1   32.   The system of claim 28 wherein the receiving means comprises
2   means for initiating the decoding without requests for the media data of the first
3   type of frames.

1   33.   The system of claim 28 wherein the receiving means comprises
2   means for depicting at least one visual image using media data of the initially
3   decoded first type of frames prior to decoding of an entirety of the compressed
4   media data.

1   34.   The system of claim 28 wherein the receiving means comprises
2   means for decoding the compressed media data of the second type of frames
3   using initially decoded media data of the first type of frames.

1   35.   The system of claim 28 wherein the receiving means comprises
2   means for decoding the compressed media data of the second type of frames
3   responsive to user interaction with decoded media data of the first type of
4   frames.

1   36.   The system of claim 28 wherein the receiving means comprises
2   means for decoding all of the first type of frames comprising anchor frames
3   before the receiving the data requests, and for depicting an image responsive to
4   the decoding the second type of frames comprising B frames, and for decoding
5   no more than a single one of the B frames to depict the image.

1   37.   The system of claim 28 wherein the receiving means comprises
2   means for decoding the second type of the frames out of sequence.